Europäisches Patentamt

**European Patent Office** 

Office européen des brevets



(11) EP 0 862 882 A1

(12)

## **EUROPEAN PATENT APPLICATION**

- (43) Date of publication: 09.09.1998 Bulletin 1998/37
- (51) Int. Cl.6: A47J 31/40
- (21) Application number: 98101852.6
- (22) Date of filing: 04.02.1998
- (84) Designated Contracting States:

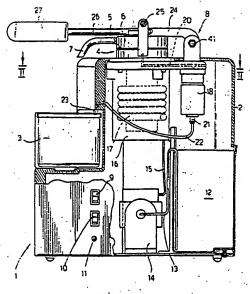
  AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC

  NL PT SE

  Designated Extension States:

  AL LT LV MK RO SI
- (30) Priority: 05.02.1997 IT MI970222
- (71) Applicant: C.M.A. S.p.A. 31058 Susegana (Treviso) (IT)

- (72) Inventor: Nello, Dal Tio 31058 Susegana (Treviso) (IT)
- (74) Representative:
  Dalla Rosa, Adriano
  Via S. Vito 13/B
  33170 Pordenone (IT)
- (54) Express-coffee machine loadable with wafers
- (57) Express-coffee-machine loadable with wafers for family or professional use including a casing (2), a unit (4) for pressing the wafer (36), into which the water is led through a boiler (16) which is arranged below said unit (4), permitting an opening from the above of said unit (4).



illustrated in Fig. 6, the head 6 is initially lowered onto the head 5 by making a first rotation of the arm 24 hinged with the unit 4, until the head 6 engages the head 5 as Fig. 5 shows.

In order that the fork 28 is in a proper engagement position with respect to the projection 31, when the two heads 5 and 6 are into contact, the lever 26 contains a resilient element 34 (Fig. 6) in particular a spring, so that when the closing device 8 is not operating, the lever 26 is moved away of an opening angle with respect to the arm 24 and thereby permitting the fork 28, which in turn is integral with the arm 24, to attain the proper engagement position.

The opening angle of the lever 26 with respect to the arm 24 is regulated by means of blocks 35. Thereafter, a further pressure on the lever 26 causes a rotation of the lever 26 with respect to the joint 25, by engaging the cavities 30 of the lever 26 with the projections 31 of the fixed head 5.

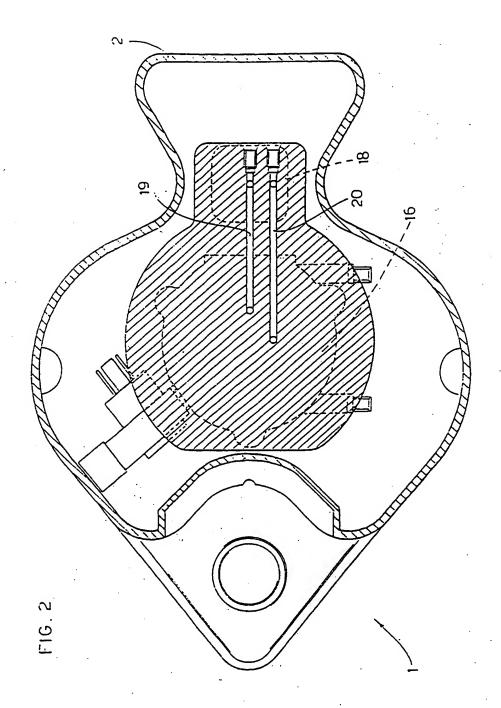
Said cavities 30 have flared edges in order to facilitate the insertion into said projections 31. According to what explained, there are clear the advantages of the coffee machine according to the invention, which is provided with a simplified closing unit, which makes the operations of loading and cleaning thereof easier.

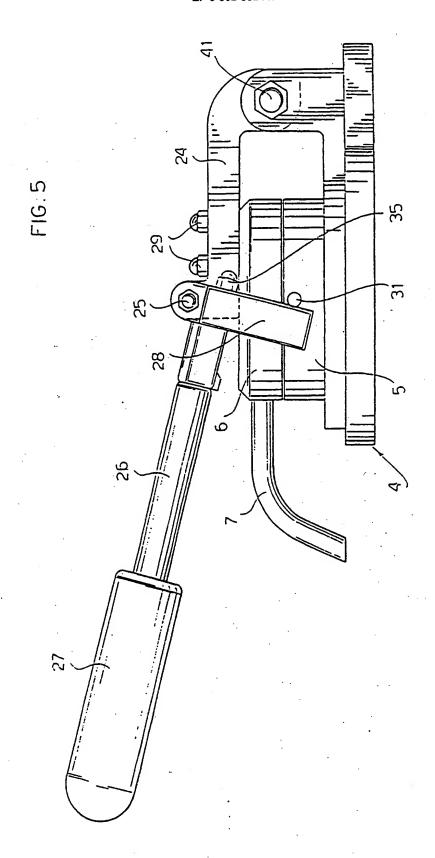
Claims

- Express coffee machine loadable with wafers including a casing (2), a unit (4) for the pressing of the wafer (36) in which the water is led through a boiler (16), characterized in that said unit (4) includes a fixed lower head (5) and a movable upper head (6) which can be engaged and disengaged to each other by means of lever closing means (8), and that said boiler (16) is arranged below said unit (4).
- Coffee machine according to claim 1, characterized in that said lever closing means (8) includes an arm (24) carrying said movable upper head (6), hinged at its first end portion with the structure carrying said fixed lower head (5) and connected at the other end portion by means of a joint (25) with a control lever (26).
- 3. Coffee machine according to claim 2, characterized in that said control lever (26) is fixed integrally with a fork (28), at the ends of which some cavities (30) engaging projections (31) provided on the fixed head (5) are provided, said cavities (30) being provided with flared edges in order to facilitate the introduction of said projections (31) therein.
- Coffee machine according to claim 3, characterized in that said control lever (26) contains a resilient element (34), in particular a spring.

Coffee machine according to claim 3, characterized in that said control lever (26) co-operates with blocks (35) for regulating the opening angle of the same lever with respect to said arm (24).

3





7



## **EUROPEAN SEARCH REPORT**

Application Number EP 98 10 1852 .

ategory	Citation of document with indication, where appropriate, of relevant passages			Relevant to claim		
A	US 2 451 195 A (BRO) * column 4, line 18 figures 1-10 *	2 451 195 A (BROWN) 12 October 1948 column 4, line 18 - column 8, line 19; pures 1-10 *			A47J31/40	
<b>A</b>	US 3 007 392 A (PEC 1961 * column 1, line 41 figures 1-3 *			1-3		
Α .	US 5 531 152 A (GAR 1996 . * column 5, line 58 figures 4,5 *			1 **	-	
Α .	US 3 403 617 A (LAMPE WILLY G) 1 October 1968 * column 2, line 9 - column 4, line 72; figures 1,2 *			1		
A	DE 296 01 233 U (J J DARBOVEN GMBH & CO) 13 June 1996				TECHNICAL FI SEARCHED	ELOS (int.Cl.6)
A	EP 0 615 713 A (EUROMATIK SRL) 21 September 1994				A47J	
						·
	,					
,	The present search report has	been drawn up for all	claims			
	Place of search	Date of comp	letion of the search		Exeminer	
THE HAGUE 7 May			1998	Boo	Bodart, P	
CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document			T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons  ă: member of the same patent family, corresponding document			

O FORM 1503 OF